



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,011	06/11/2004	Shyam K. Gupta		4010
34820	7590	09/29/2008		
SHYAM K. GUPTA			EXAMINER	
BIODERM RESEARCH				CHUI, MEI PING
5221 E. WINDROSE DRIVE			ART UNIT	PAPER NUMBER
SCOTTSDALE, AZ 85254				1616
			MAIL DATE	DELIVERY MODE
			09/29/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/710,011	GUPTA, SHYAM K.
	<b>Examiner</b>	<b>Art Unit</b>
	MEI-PING CHUI	1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 05 November 2007 and 11 July 2008.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) 16-20 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-15 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date N/A.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

***DETAILED ACTION***

***Status of Action***

(1) Receipt of Amendments/Remarks filed on 11/05/2007 and amended claims filed on 07/11/2008 are acknowledged. Claims 1-20 are currently presented in this application. Claims 1-10 have been amended, new claims 11-20 have been added.

(2) Upon further search and consideration, Applicant's amendment necessitated the new grounds of rejections presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL.**

***Status of Claims***

Newly submitted claims 16-20 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: all original claims for the invention are drawn to a composition and there were no method claim(s) presented originally in the application.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 16-20 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Rejoinder Practice***

The examiner has required restriction between method (claims 16-20) and product (claims 1-15) claims. Where applicant elects claims directed to the product, and the product

claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b).

Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Accordingly, claims **1-15** are presented for examination on the merits for patentability as they read upon the elected subject matter, and claims **16-20** directed to non-elected inventions are withdrawn.

Rejections and/or objections not reiterated from the previous Office Action is/are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

***New ground of Claim Rejections***

***Claim Rejections - 35 USC § 112 second paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

**Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

(1) Claims 1-10 are rejected because they recite the term “agent” (see claim 1, line 2). The term “agent” is defined, according to Merriam-Webster’s Collegiate Dictionary (at <http://www.merriam-webster.com/dictionary/agent>), as “a single chemically active principle”. However, claims 1-10 also recite the agent is a combination of (i) and (ii) (see claim 1, lines 5-6)

or other components such as carriers. It is unclear if Applicant intends to claim a single agent or intends to claim a composition comprising said agent in the claims. Therefore, one of ordinary skill in the art would not be reasonably apprised of the scope of the invention, and thus rendering the claim indefinite.

(2) Claim 9 is indefinite because it recites that “said carrier base is selected from the group consisting of traditional water and oil emulsions”. Since the term “traditional” is not defined by the claim, and the specification does not provide a standard for ascertaining the requisite degree; it is unclear what the “traditional water and oil emulsion” means and compares to “non-traditional water and oil emulsion”. Therefore, one of ordinary skill in the art would not be reasonably apprised of the scope of the invention, and thus rendering the claim indefinite.

(3) Claim 11 recites the limitation of “a composition” according to claim 3 (see line 1). There is insufficient antecedent basis for this limitation in the claim because claim 3 is drawn to “an agent”, not a composition. Claims 12-15 are rejected because they depend from claim 11 and thus incorporate its limitation.

For examination purposes, the Examiner takes the position that the instant claims are drawn to a composition, for the following rejection(s).

***Claim Rejection - 35 U.S.C. § 102***

**The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:**

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on

sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Araya, A. (U.S. Patent Application 2003/0148876, which is equivalent to WO 01/94512 published on 12/13/2001).**

Araya, A. discloses a powder mixture of a crystalline aluminosilicate (page 2, [0024], lines 2-3 and [0025]), which is commonly known as zeolite, and a salt of second metal consisting of titanium or zinc (page 2, [0027], lines 1-4) that is sufficient to replace parts of the first metal moiety contains in the zeolite (page 2, [0027], lines 6-7).

Araya, A. discloses that the powder mixture is a “dry” mixture where no water is added when it is prepared (page 2, [0028], lines 1-2), or the powder mixture is a hydrated form, (page 2, [0028], lines 7 and 9).

Araya, A. also discloses that the composition is a powder, liquid, gel or solid bar or cream ((page 2, [0030], line 11 and page 3, [0041], line 3), in which a cream is a form of emulsion.

With respect to the art rejections set forth above, it is noted that the reference of Araya, A. does not disclose that the composition can be used in the manner instantly claimed in claims 5-7; however, the intended use of the claimed composition does not patentably distinguish the composition, *per se*, since such undisclosed use is inherent in the reference composition. In order to be limiting, the intended use must create a structural difference between the claimed composition and the prior art composition. In the instant case, the intended use does not create a structural difference, thus the intended use is not limiting.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1, 3, and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garrison, M. S. (EP 1101485 A1) in view of Jenkins, E. E. (U. S. Patent No. 3,578,398).**

***Applicant claims***

Applicant claims a composition comprising a zeolite and a carrier base, wherein the zeolite is zinc zeolite or titanium zeolite, and the carrier base is an emulsion. Applicant also claims that the emulsion additionally includes UV absorber, i.e. octocrylene, menthyl anthranilate, PABA or benzophenone-3.

***Determination of the scope and content of the prior art  
(MPEP 2141.01)***

Garrison, M. S. teaches a composition in the form of an emulsion comprising zeolite. Garrison, M. S. teaches that the zeolite-containing composition is highly stable against viscosity loss at elevated temperatures (page 2: [0001, 0003-0006] or lines 7 and 21-22), and can be used for cosmetic and/or pharmaceutical skin treatment, skin care, hair care, personal care and color compositions (page 2: [0007], lines 1-4).

Garrison, M. S. also teaches that the zeolite in the emulsion is a natural or synthetic zeolite, preferably sodium aluminosilicate zeolite (page 2" [0008], lines 1-3). Garrison, M. S. further teaches that the zeolite-containing emulsion can also include one or more sunscreens or UV-absorbing agents, i.e. methyl anthranilate, para aminobenzoic (PABA) or octocrylene (page 3: [0024]).

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

(1) Garrison, M. S. teaches an emulsion comprising a zeolite and a UV-absorbing agent(s) for use in cosmetic or personal care applications, Garrison, M. S. does not teach a specific zeolite, i.e. zinc zeolite or titanium zeolite. However, the deficiency is cured by the teaching of Jenkins, E. E. as evidenced.

Jenkins, E. E. teaches zeolite (or crystalline aluminosilicate) has a definite repetitive crystalline structure, which can be obtained from natural and synthetic sources. Jenkins, E. E. teaches that the cavities and pores of a specific zeolite are precisely uniform in size and can be

utilized in a variety of ways to take advantage of the adsorptive properties of the zeolite (column 1, lines 12, 31, 39-46).

Jenkins, E. E. also teaches that the structures of zeolite include a wide variety of positive ion-containing crystalline aluminosilicate, both natural and synthetic, wherein the positive ions can be alkali cations, i.e. sodium or potassium, or the cations can be the cations other than sodium or potassium, zinc (column 2, lines 10-11, 15-16 and 43-48).

Jenkins, E. E. further teaches that the synthetic form of zeolite can undergo ion-exchange to exchange at least a portion of the original cations for other cations, i.e. zinc or titanium, in the structure (column 2, lines 33-35; column 5, lines 12 and 16).

(2) In addition, Garrison, M. S. also does not teach the UV-absorbing agent is benzophenone-3.

*Finding of prima facie obviousness Rational and Motivation*  
(MPEP 2142-2143)

(1) It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Garrison, M. S. and Jenkins, E. E. to arrive at the instant invention.

One of ordinary skill would have been motivated to utilize zinc or titanium zeolite instead of sodium zeolite and reasonably expects a similar and successful result because the alkali cation contains in zeolite can be easily replaced by another cations through an ion-exchange process, as taught by Jenkins, E. E. Therefore, the use of zinc or titanium zeolite in an emulsion is merely

judicious selection, as taught by Jenkins, E. E., which would be dependent on the desirable type of zeolite to be selected.

(2) One of ordinary skill also would have been motivated to utilize benzophenone-3 as the UV-absorbing agent instead of octocrylene or PABA in an zeolite-containing emulsion, and reasonably expects a similar and successful UV-absorbing result, because benzophenone-3 and octocrylene or PABA are functional equivalent UV-absorbing agents, thus they can be used interchangeably.

From the teaching of the reference, it would be obvious that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### ***Conclusion***

No claims are allowed.

Applicant's amendment necessitated the new ground of rejections presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b) and § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication from the Examiner should direct to Helen Mei-Ping Chui whose telephone number is 571-272-9078. The examiner can normally be reached on Monday-Thursday (7:30 am – 5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either PRIVATE PAIR or PUBLIC PAIR. Status information for unpublished applications is available through PRIVATE PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PRIVATE PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HMC

/Mina Haghigian/  
Primary Examiner, Art Unit 1616